

Comparisons of Job Characteristics

Focus Occupation: [Architectural and Engineering Managers \(11-9041\)](#)

Associated Occupation: [Mechanical Engineering Technicians \(17-3027\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Architectural and Engineering Managers (11-9041)

Associated Occupation: Mechanical Engineering Technicians (17-3027)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mechanical	6.8	18.0	10.4	<< Extensive education and/or training may be required
Engineering and Technology	5.7	16.1	23.2	>> Current knowledge level is likely more than sufficient
Design	5.2	15.1	19.0	>> Current knowledge level is likely more than sufficient
Production and Processing	6.0	12.6	10.7	< Expanded education and/or training may be required
Physics	4.3	10.2	13.0	> Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 46

Focus Occupation: Architectural and Engineering Managers (11-9041)

Associated Occupation: Mechanical Engineering Technicians (17-3027)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Operation Monitoring	6.6	10.7	4.4	<< Extensive development of skills in this area may be required
Quality Control Analysis	5.9	10.2	7.0	<< Extensive development of skills in this area may be required
Operation and Control	5.4	9.0	1.3	<< Extensive development of skills in this area may be required
Troubleshooting	4.5	7.3	2.6	<< Extensive development of skills in this area may be required
Equipment Maintenance	3.5	6.8	1.0	<< Extensive development of skills in this area may be required

Repairing	3.4	6.6	1.0	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	6.2	1.0	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 83			
Focus Occupation: Architectural and Engineering Managers (11-9041) Associated Occupation: Mechanical Engineering Technicians (17-3027)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Category Flexibility	9.0	10.7	11.4	0	Current ability level may be sufficient
Control Precision	6.6	10.2	1.0	<<	Extensive improvement in abilities may be required
Visualization	7.5	10.2	10.1	0	Current ability level may be sufficient
Number Facility	6.3	9.7	11.2	>	Current ability level is likely sufficient
Perceptual Speed	7.4	9.6	6.9	<<	Extensive improvement in abilities may be required
Visual Color Discrimination	6.4	9.2	6.6	<<	Extensive improvement in abilities may be required
Wrist-Finger Speed	3.2	5.5	1.0	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 70
Focus Occupation: Architectural and Engineering Managers (11-9041) Associated Occupation: Mechanical Engineering Technicians (17-3027)		
Work Activities	Exclusivity of Activity	
Communicate technical information	4	
Confer with engineering, technical or manufacturing personnel	25	
Estimate cost for engineering projects	69	
Evaluate engineering data	60	
Prepare technical reports or related documentation	22	
Read blueprints	10	
Read schematics	34	
Read technical drawings	7	
Understand engineering data or reports	48	
Understand technical operating, service or repair manuals	6	
Use scientific research methodology	21	
Use technical regulations for engineering problems	61	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 72

Focus Occupation: Architectural and Engineering Managers (11-9041)
Associated Occupation: Mechanical Engineering Technicians (17-3027)

Tools and Technologies	Exclusivity
Business function specific software	1
Computer data input devices	2
Computers	1
Content authoring and editing software	1
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Network applications software	1
Safety apparel	4
Viewing and observing instruments and accessories	4
Vision protection and accessories	3

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.